



Conflict and security indices:

A summary of open-source data

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Defence R&D Canada

Technical Memorandum DRDC Toronto TM 2008-168 September 2008



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Abstract

This DRDC Toronto technical memorandum contains summaries of a select number of widely used conflict and security indices freely available as open-source databases on the World Wide Web. It provides a succinct description and purpose of each project, information about the supporting organization, principal investigators, data sources used, temporal coverage, the number of countries included, variables, methodology, accessibility and format. The summaries represent a focused extension of DRDC Toronto Technical Report 2008-167, which aimed to provide a comprehensive overview of open-source databases accessible via the Internet that are meant to be used as guides for international investors, official aid donors, policy makers, analysts, academia and other information seekers looking to exploit conflict-and security-related open-source information.

Résumé

Le présent document technique de RDCC Toronto résume un certain nombre d'indices de conflits et de menaces à la sécurité largement consultés sur le Web. Il fournit une brève description de chaque projet ainsi que ses objectifs et des renseignements à propos de l'organisme d'appui, des principaux enquêteurs, des sources de données utilisées, de la portée temporelle, du nombre de pays participants, des données et des variables, de la méthodologie, de l'accessibilité et du format. Ces résumés constituent la suite du rapport technique 2008-167 de RDCC Toronto, qui donnait un aperçu complet des bases de données ouvertes et accessibles sur Internet destinées à guider les investisseurs étrangers, les donateurs officiels, les décideurs, les analystes, les universitaires et autres personnes cherchant à obtenir de l'information liée aux conflits et à la sécurité à partir de sources ouvertes.

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Executive summary

Conflict and security indices: A summary of open-source data

Pavlovic, N.J.; Blackler, K.; Mandel, D.R.; DRDC Toronto TM 2008-168; Defence R&D Canada – Toronto; September 2008.

This DRDC Toronto technical memorandum contains summaries of a select number of widely used conflict and security indices freely available as open-source databases on the World Wide Web. It provides a succinct description and purpose of each project, information about the supporting organization, principal investigators, data sources used, temporal coverage, the number of countries included, variables, methodology, accessibility and format.

The information was obtained and collated from the websites and official publications of the supporting organizations responsible for developing the index. Each summary follows a standardized format in order to facilitate comparison. However, due to variability in the amount and quality of the information provided by the organizations, some summaries are more comprehensive than others. Best efforts were made to provide information that is accurate and up to date, although given that most of the projects are on-going, it will remain so only for a limited time in at least some respects (e.g., current coverage).

The summaries provided in this technical memorandum represent a focused extension of DRDC Toronto Technical Report 2008-167, which aimed to provide a comprehensive overview of open-source databases accessible via the Internet that are meant to be used as guides for international investors, official aid donors, policy makers, analysts, academia and other information seekers looking to exploit conflict-and security-related open-source information. Both the earlier technical report and the present technical memorandum are deliverables under Technology Investment Fund (TIF) project 15dz01 "Predictive Models of Adversarial Intent."

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Conflict and security indices: A summary of open-source data

Pavlovic, N.J.; Blackler, K.; Mandel, D.R.; DRDC Toronto TM 2008-168; R & D pour la défense Canada – Toronto; Septembre 2008.

Le présent document technique de RDCC Toronto résume un certain nombre d'indices de conflits et de menaces à la sécurité largement consultés sur le Web. Il fournit une brève description de chaque projet ainsi que ses objectifs et des renseignements à propos de l'organisme d'appui, des principaux enquêteurs, des sources de données utilisées, de la portée temporelle, du nombre de pays participants, des données et des variables, de la méthodologie, de l'accessibilité et du format.

L'information a été tirée des sites Web et des publications officielles des organismes d'appui. Chaque résumé repose sur une structure normalisée afin de faciliter la comparaison. Toutefois, étant donné que la quantité et la qualité des renseignements fournis varient d'un organisme à l'autre, certains résumés sont plus exhaustifs que d'autres. On s'est efforcé de transmettre de l'information exacte et à jour, mais comme la plupart des projets sont en cours, à certains égards (notamment la portée), elle ne le restera que pour un temps limité.

Les résumés figurant dans le document technique constituent la suite du rapport technique 2008-167 de RDCC Toronto, qui donnait un aperçu complet des bases de données ouvertes et accessibles sur Internet destinées à guider les investisseurs étrangers, les donateurs officiels, les décideurs, les analystes, les universitaires et autres personnes cherchant à obtenir de l'information liée aux conflits et à la sécurité à partir de sources ouvertes. L'ancien rapport et le nouveau document technique sont tous deux des éléments livrables du projet 15dz01 intitulé « Modélisation prédictive de l'intention antagoniste » mis sur pied dans le cadre du Fonds d'investissement technologique (FIT).

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Introduction

This DRDC Toronto technical memorandum contains summaries of a select number of widely used conflict and security indices freely available as open-source databases on the World Wide Web. The indices were selected from a comprehensive list of open-source databases published in DRDC Toronto Technical Report 2008-167, according to the following criteria: 1) the index was developed by a credible source, 2) the project appeared to be ongoing (i.e., periodically updated), and 3) the data was in the country/year format to allow comparisons across indices for further study. Sources were assessed as credible if the project website contained sufficient information concerning the method for data collection, and the expertise of the investigators. Other factors were also taken into consideration such as the agenda motivating the project and the reputation of the organization. For the purposes of the report, an index was defined as an aggregate numerical score of component variables that are presumed to define a construct and are combined in a consistent manner and according to a clearly specified method or a formula¹. The summary provides a succinct description and purpose of the project behind each of the indices, information about the supporting organization, principal investigators, data sources used, temporal coverage, the number of countries included, indices and variables, methodology, accessibility, and format.

The information was obtained and collated from the websites and official publications of the supporting organizations responsible for developing the index. Each summary follows a standardized format in order to facilitate comparison. However, due to variability in the amount and quality of the information provided by the organizations, some summaries are more comprehensive than others. Best efforts were made to provide information that is accurate and up to date, although given that most of the projects are on-going, the information will remain so only for a limited time in at least some respects (e.g. current coverage).

The summaries provided in this technical memorandum represent a focused extension of DRDC Toronto Technical Report 2008-167 [1], which aimed to provide a comprehensive overview of open-source databases accessible via the Internet that are meant to be used as guides for international investors, official aid donors, policy makers, analysts, academia and other information seekers looking to exploit conflict and security-related open-source information. Both the earlier technical report and the present technical memorandum are deliverables under Technology Investment Fund project 15dz01 "Predictive Models of Adversarial Intent."

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¹ In some cases, an index is also referred to as an indicator (i.e. Human Development Indicators and World Governance Indicators). Although the two terms should not be used interchangeably, both of the above mentioned cases fit our definition of an index.

Bertelsmann's Transformation Index [2]

Description/purpose:

The goal of the project is to contribute to the development of successful strategies for the peaceful and sustainable transformation towards a constitutional democracy and socially responsible market economy. Democracy and market economy are viewed to be powerful models of sustainable societies throughout the world, and it is recognized that good governance is essential to successful reform policies. The Bertelsmann Transformation Index (BTI) provides a framework for an exchange of best practices among agents of reform, by examining and assessing if and how developing countries, and countries going through transformation, manage social change toward democracy and a market economy. The findings are synthesized into two sets of rankings, the Status Index and the Management Index.

Supporting organization:

Bertelsmann Stiftung and the Centre for Applied Policy Research (CAP), University of Munich.

Principal investigators:

Sabine Donner, Bertelsmann Stiftung Dr. Hauke Hartmann, Bertelsmann Stiftung Dr. Martin Brusis, CAP, University of Munich Olaf Hillenbrand, CAP, University of Munich Dr. Peter Thiery, CAP, University of Munich

Data sources:

Standardized country reports and rankings produced by country experts.

Temporal domain/current coverage:

2003, 2006 and 2008.

Number of countries:

125.

Indices/variables:

The Status Index and the Management Index. The Status Index ranks the countries according to their state of democracy and market economy, and the Management Index ranks them according to their leadership's management performance.

Methodology:

A total of 17 criteria, distributed among the dimensions of democracy, market economy and management, are subdivided into 52 questions. The countries are selected according to the following criteria: they have yet to achieve a fully consolidated democracy and market economy, have populations of more than two million, and are recognized as sovereign states. Based on the above criteria, and the questions explained in detail in the manual, an expert on each country prepares a standardized report of approximately 6,500 words that includes background information on the country, key statistics, and an overview of the country's history of transformation and prospects for the future. To ensure validity, reliability, objectivity and

comparability, the countries are divided into 7 regional groups, and a regional coordinator (a political scientist with comparative and regional expertise) supervises preparation of the country analyses. The research is advised by the BTI board, consisting of scholars and experienced practitioners in the area of development and transformation. Experts are chosen by regional coordinators. A second expert independently reviews and comments on each report. Comments from the anonymous reviewer and other readers are used in revising the analyses. The authors and the reviewers independently assign scores to the 52 questions using a 10-point rating scale, ranging from 10 (best) to 1 (worst). This is further subdivided into four response options, each of which describes an empirical assessment that corresponds to a particular rating. The regional coordinators and the BTI board assign scores based on these ratings and reports and calibrate them within each region and across regions. The ratings are then transformed into rankings that reflect both the absolute benchmarks as well as comparison with other countries. To create the indices, the scores are aggregated for each criterion and for each dimension with a simple three-step process of calculating their arithmetic mean.

Access to information/availability:

http://www.bertelsmann-transformation-index.de/11.0.html?&L=1

Format:

Excel.

Corruption Perceptions Index [3]

Description/purpose:

The Corruption Perceptions Index is a composite index, a poll of polls that ranks countries in terms of the degree to which corruption is perceived to exist among public officials and politicians. Corruption is defined as the abuse of public office for private gain. The surveys encompass both administrative and political corruption, and questions relate to the misuse of public power for private benefit (such as bribery of public officials, kickbacks in public procurement, and embezzlement of public funds), or probe the strength of anti-corruption policies. The index does not take into account hard empirical data, such as comparing the amount of bribes or the number of prosecutions or court cases, to assess the overall levels of corruption in different countries. The rationale for not including empirical data is that it does not reflect actual levels of corruption, but only highlights the quality of prosecutors, courts and/or the media in exposing corruption across countries. Transparency International uses a method that involves assessing the experience and perceptions of those who are most directly confronted with the realities of corruption in a country.

Supporting organization:

Transparency International

Principal investigators:

Johann Graf Lambsdorff, a university professor based in Passau, Germany.

Data sources:

The CPI 2007 is based on data from 14 sources from 12 different institutions. The sources include rankings of the overall level of corruption in the public and private sectors, as well as surveys. Rankings are developed by country experts (both resident and non resident) and resident business leaders. Country experts include: ADB, the Country Performance Assessment Ratings by the Asian Development Bank, compiled 2006, published 2007; AFDB, the Country Policy and Institutional Assessment by the African Development Bank, compiled in 2005 and published December 2006; BTI, the Bertelsmann Transformation Index, Bertelsmann Foundation, 2007, to be published 2008; CPIA, the Country Policy and Institutional Assessment by the IDA and IBRD (World Bank), compiled 2006, published 2007; EIU, the Economist Intelligence Unit, 2007; FH, Freedom House Nations in Transit, 2007: MIG, Grev Area Dynamics Ratings by the Merchant International Group, 2007; UNECA, United Nations Economic Commission for Africa, African Governance Report compiled in 2005, published 2006; and GI, Global Insight (formerly World Markets Research Centre), Country Risk Ratings 2007. Business leaders include: IMD, the International Institute for Management Development, Lausanne (two annual publications from 2006-2007); PERC, the Political and Economic Risk Consultancy, Hong Kong (two annual publications from 2006-2007); and WEF, the World Economic Forum, 2006.

Temporal domain/current coverage:

1995-2008.

Number of countries:

180

Indices/variables:

CPI score and rank, along with the number of sources, high-low range, standard deviation and confidence range for each country.

Methodology:

For CPI sources that are surveys, data from the last two years are used (to provide a smoothing effect). For CPI sources that are scores, only the most recent iteration is used, since these are peer reviewed and change little from year to year. The matching percentiles standardization technique is used to determine the mean value for a country, and a beta-transformation is then performed on scores. Next, all values for a country are averaged to determine a country's score, and a 90% confidence range is established by a bootstrap (non-parametric) methodology. Pearson's and Kendall's rank correlations are performed, and have generally demonstrated high correlation among sources. The CPI methodology is reviewed by leading international experts in the fields of corruption, econometrics and statistics that comprise the Index Advisory Committee. The committee makes suggestions for improving the CPI, and TI management makes the final decisions on whether to implement the suggestions.

Access to information/availability:

http://www.transparency.org/policy_research/surveys_indices/cpi

Format:

PDF, HTML.

Democracy Rank [4]

Description/purpose:

The World Audit Report reviews the state of public corruption, current practice in human rights, political rights, free speech, and the overall state of the rule of law in 150 nations, and compiles the world democracy table based on these variables. The goal of the audit is to provide a global geopolitical perspective in order to publicize the corruption, human rights abuses, vote stuffing, miscarriages of justice, and press censorship in any country. The democracy audit is a comparative study of democracy around the world that allows researchers to track the progress or decline of any nation over time and compare these changes with the status of democracy in any other nation.

Supporting organization:

World Audit is an international not-for-profit company, registered in England by the registered charity, World Concern.

Principal investigators:

Clive Lindley, publisher

Data sources:

Amnesty on Human Rights, Freedom House, International Commission of Jurists, Human Rights Watch, Transparency International.

Temporal domain/current coverage:

2007 and 2008.

Number of countries:

150 nations (populations exceeding 1 million).

Indices/variables:

Political rights, civil liberties, press freedom, perceptions of corruption, human rights, and the rule of law, are used to produce the democracy rank.

Methodology:

Freedom House political rights (P) and civil liberties (C) ratings on a scale of 1 to 7 (1 representing the highest and 7 the lowest level of freedom) are used to assign countries to a division (D) within the democracy table in the following manner:

If P and C are both 1 then D=1

If P is 1 and C is 2 then D=2

If P + C is between 3 and 7 then D=3

If P + C is seven or above then D=4

Within each division positions are further calculated using an average of Freedom House press freedom and World Audit corruption scores.

The World Audit corruption scores are taken from the Transparency International Corruption Perceptions Index (CPI) and calculated using the following equation where T is the CPI score: World Audit corruption score = 100 - 10T

The resulting World Audit corruption scores lie in the range of 0 and 100, with lower being more favourable.

Access to information/availability: http://www.worldaudit.org/publisher.htm

Format:

Excel.

Failed States Index [5]

Description/purpose:

Foreign Policy magazine and Fund for Peace created the Failed States Index (FSI) to provide a better picture of the world's weakest states, where the risk of failure is high. The index ranks countries in order of their vulnerability to violent internal conflict and societal deterioration, using 12 social, economic, and political indicators.

Supporting organization:

Fund for Peace, an independent research organization and Foreign Policy magazine. The Ploughshares Fund supports the work of the Fund for Peace to produce the index.

Principal investigators:

Pauline H. Baker, Joelle Burbank, Nate Haken, Krista Hendy, Mark Loucas, Shawn Rowley and Patricia Taft.

Data sources:

The FSI focuses on risk indicators and is based on hundreds of thousands of articles and reports from 12,000+ global and regional sources, collected using Thomson dialog, and processed by the Conflict Assessment System Tool (CAST) Software. The articles and reports are not available directly to the public.

Temporal domain/current coverage:

2005-2008.

Number of countries:

177 countries.

Indices/variables:

Social Indicators

- 1. Mounting Demographic Pressures
- 2. Massive Movement of Refugees or Internally Displaced Persons creating Complex Humanitarian Emergencies
- 3. Legacy of Vengeance-Seeking Group Grievance or Group Paranoia
- 4. Chronic and Sustained Human Flight

Economic Indicators

- 5. Uneven Economic Development along Group Lines
- 6. Sharp and/or Severe Economic Decline

Political Indicators

- 7. Criminalization and/or Delegitimization of the State
- 8. Progressive Deterioration of Public Services
- 9. Suspension or Arbitrary Application of the Rule of Law and Widespread Violation of Human Rights
- 10. Security Apparatus Operates as a "State Within a State"
- 11. Rise of Factionalized Elites

12. Intervention of Other States or External Political Actors

Methodology:

The index is compiled using the Conflict Assessment System Tool (CAST) created by Fund for Peace in 1996. CAST is an internationally recognized methodology for early warning and assessment of internal conflicts. It is used to assess violent internal conflicts and risk of state failure; it also assesses the capacities of core state institutions and analyzes trends in state instability.

CAST Basic Methodology:

- 1) Pre-Assessment Steps: collect relevant conflict data; develop a complete chronology of events; choose key dates for Trend Point assessment.
- 2) Rating the twelve Indicators: Indicators measure the key social, economic, political and military conditions within a state at a given date. Each indicator is rated on a scale of 0 (low intensity) to 10 (high intensity). Total ratings are calculated to get trend points and aggregate and individual indicator trend lines are generated.
- 3) Assessing the Core Five: Core Five assessment helps determine the capacity of core institutions to manage the situation at hand or a state's "capacity to cope".
- 4) Identifying STINGS: STINGS are the unanticipated factors that act as catalysts to accelerate or decelerate the immediate risk of conflict
- 5) Building a Conflict Map: Plotting the course of the conflict for each significant date allows one to visually depict the potential for the conflict to turn violent or to be resolved.

Access to information/availability:

http://www.fundforpeace.org/web/index.php?option=com_content&task=view&id=99&Itemid=323

http://www.ploughshares.org/about_us.php

http://foreignpolicy.com/index.php

Additional resources are available through CAST Premium subscription.

Format:

HTML.

Fragile States Index [6]

Description/purpose:

Carleton's Country Indicators for Foreign Policy (CIFP) team has been working with the Canadian government on the Failed and Fragile State Project to examine state fragility using a combination of structural data and event monitoring. The Fragile States Index was developed as part of a toolkit that encompasses the monitoring, forecasting, and evaluation of failed and fragile states, as well as the assessment of supporting policies intended to address the development, security, and economic challenges they represent. It is based on the idea that a state needs to exhibit three fundamental properties (Authority, Legitimacy and Capacity) and that weaknesses in one or more of these dimensions will have an impact on the overall fragility of that country. "Authority refers to the ability of the state to enact binding legislation over its population and to provide the latter with a stable and safe environment. Legitimacy refers to the ability of the state to command public loyalty to the governing regime and to generate domestic support for government legislation being passed and policies being implemented. Capacity refers to the power of a state to mobilize public resources for productive uses."

Supporting organization:

Carleton University, Norman Patterson School of International Affairs (NPSIA), Canadian International Development Agency (CIDA)

Principal investigators:

David Carment, Professor NPSIA, Principal Investigator Stewart Prest - MA, NPSIA, Project Manager and Senior Research Associate Yiagadeesen Samy, Professor NPSIA, Senior Research Analyst

Data sources:

These indicators are drawn from a variety of open sources, including the World Bank, the United Nations Development Programme, the United Nations High Commissioner for Refugees, the Stockholm International Peace Research Institute, and the Minorities at Risk and POLITY IV data sets from the University of Maryland.

Temporal domain/current coverage:

2007.

Number of countries:

193 countries.

Indices/variables:

The index is based on up to 75 structural indicators, selected on the basis of their relation to state fragility and their level of country coverage. They are grouped into six clusters: Governance, Economics, Security and Crime, Human Development, Demography, and Environment.

Methodology:

² Source: http://www.carleton.ca/cifp/app/ffs data methodology.php

The Fragile States Index employs a methodology of relative assessment. The analysis begins with a structural profile of the country, which is a composite index that measures overall country performance along the six dimensions. The structural data is then processed using the ALC (Authority, Legitimacy, Capacity) framework, where a state's performance on a given indicator is ranked using a 9-point index. The countries are grouped in 9 clusters, such that the best performing ninth of states receive a score of 1, and the worst performing ninth of states receive a score of 9. For global rank scores, averages are taken over the most recent five years contained in the CIFP data set. The scores are then modified to reflect positive or negative trends and excessive volatility. The results for each country are then averaged to produce its final score. A high score of 6.5 or higher indicates a country that is performing poorly relative to other states, and a low score in the range of 1 to 3.5 indicates that a country is performing well relative to others. Values in the range of 3.5 to 6.5 indicate performance approaching the global mean.

Access to information/availability:

http://www.carleton.ca/cifp/

Format

HTML, PDF.

Freedom in the World Index [7]

Description/purpose:

The survey provides annual ratings and narrative reports about the state of global freedom. It defines freedom as "the opportunity to act spontaneously in a variety of fields outside the control of the government and other centers of potential domination". Freedom is measured according to two broad categories: political rights, or people's ability to participate freely in the political process; and civil liberties, or freedom of expression and belief. The survey results have been published annually since 1972, and are used by policymakers, the media, international corporations, civic activists, and human rights defenders to monitor trends in democracy and track freedom worldwide.

Supporting organization:

Freedom House is an independent nongovernmental organization that supports the expansion of freedom in the world.

Principal investigators:

Peter Ackerman, Chairman of the Board Jennifer Windsor, Executive Director

Data sources:

The data was collected from foreign and domestic news reports, academic analyses, nongovernmental organizations, think tanks, individual professional contacts, and analysts' visits to the region.

Temporal domain/current coverage:

1973-current, published annually.

Number of countries:

193 countries and 15 territories.

Indices/variables:

Population, capital, political rights [numerical rating], civil liberties [numerical rating], status [Free, Partly Free, or Not Free], and a ten-year ratings timeline.

Methodology:

The survey findings are reached after a multi-layered analysis and evaluation by a team of regional experts and scholars (33 analysts and 16 senior-level academic advisors). The country and territory ratings were originally proposed by the analyst responsible for each related report and then reviewed individually and on a comparative basis in a series of six regional meetings—Asia-Pacific, Central and Eastern Europe and the Former Soviet Union, Latin America and the Caribbean, Middle East and North Africa, Sub-Saharan Africa, and Western Europe. The ratings were then compared to the previous year's findings, and any major shifts or category changes were reviewed more closely. The reviews were followed by cross-regional assessments to ensure comparability and consistency in the findings. The survey's methodology is reviewed periodically

³ Source: http://www.freedomhouse.org/template.cfm?page=351&ana page=341&year=2008

by an advisory committee of political scientists with expertise in methodological issues. Coding scheme:

- Raw Points The ratings process is based on 10 political rights questions and 15 civil liberties questions. Raw points on a scale of 0 to 4 are awarded to each question, where 0 points represents the smallest degree and 4 the greatest degree of rights or liberties present.
- Political Rights and Civil Liberties Ratings The number of points awarded to the questions is summed to produce the political rights and civil liberties ratings. Each rating of 1 through 7, with 1 representing the highest and 7 the lowest level of freedom, corresponds to a range of total points.
- Status of Free, Partly Free, Not Free Each pair of political rights and civil liberties ratings is averaged to determine an overall status of "Free" (1.0 to 2.5), "Partly Free" (3.0 to 5.0), or "Not Free" (5.5 to 7.0).
- Indications of Ratings and/or Status Changes Each country or territory's political rights rating, civil liberties rating, and status is included in the country or territory report. A change in a political rights or civil liberties rating since the previous survey edition is indicated next to the rating that has changed and a brief explanation is provided.
- Trend Arrows Positive or negative developments in a country or territory are provided using upward or downward trend arrows and a brief explanation is provided.

Access to information/availability:

http://www.freedomhouse.org/template.cfm?page=1

Format:

PDF, HTML, Excel.

Freedom of the Press Index [8]

Description/purpose:

The annual survey tracks trends in global press freedom and brings attention to countries or regions where press freedom is under threat. The survey provides the most comprehensive data on media freedom available and its findings are considered an authoritative assessment of media freedom around the world. They are used by policymakers, scholars focusing on democratic development, educators and students, press freedom advocates, journalists, governments and international institutions. Freedom House also undertakes advocacy efforts through the publication of special reports and press releases that highlight specific issues, and is actively involved with other groups in organizing events and programs designed to expand free expression around the world.

Supporting organization:

Freedom House is an independent nongovernmental organization that supports the expansion of freedom in the world.

Principal investigators:

Peter Ackerman, Chairman of the Board Jennifer Windsor, Executive Director

Data sources:

Data is obtained from overseas correspondents, staff and consultant travel, international visitors, the findings of human rights and press freedom organizations, specialists in geographic and geopolitical areas, the reports of governments and multilateral bodies, and a variety of domestic and international news media. Details and analyses of press freedom violations in a variety of countries worldwide are provided by International Freedom of Expression Exchange (IFEX) network.

Temporal domain/current coverage:

1980-current, published annually.

Number of countries:

195 countries and territories.

Indices/variables:

Numerical rankings and a rating of "Free", "Partly Free", or "Not Free". Country narratives examine the legal environment for the media, political pressures that influence reporting, and economic factors that affect access to information.

Methodology:

Countries are given a total score from 0 (best) to 100 (worst) on the basis of a set of 23 methodology questions. The questions are designed to cover the variety of ways in which pressure can be placed upon the flow of information and the ability of print, broadcast, and internet-based media to operate freely, and are grouped into three subcategories: the legal environment, the political environment, and the economic environment. The legal environment

category examines the laws and regulations that could influence media content, and the government's inclination to use these laws and legal institutions to restrict the media's ability to operate. The political environment category evaluates the degree of political control over the content of news media. The third category examines the economic environment for the media. The classification of its media as "Free," "Partly Free," or "Not Free" is based on the degree to which each country permits the free flow of news and information. Countries scoring 0 to 30 are regarded as having "Free" media; 31 to 60, "Partly Free" media; and 61 to 100, "Not Free" media.

Access to information/availability:

http://www.freedomhouse.org/template.cfm?page=16

Format:

PDF, HTML, Excel.

Global Competitiveness Index [9, 10]

Description/purpose:

The Global Competitiveness Index (GCI) is a comprehensive tool designed to measure national competitiveness. Competitiveness is defined as a set of institutions, policies, and factors that determine the level of a country's productivity. It was officially launched in September 2006 as part of the Global Competitiveness Report 2006-2007 and has now become the main index of reference for the World Economic Forum. The Global Competitiveness Report series has been published annually for three decades and is one of the most comprehensive and respected assessments of countries' competitiveness. It is produced in collaboration with leading academics and a global network of research institutes, and offers insights into the policies, institutions, and factors driving productivity.

Supporting organization:

World Economic Forum

Principal investigators:

Professor Xavier Sala-i-Martin, Columbia University

Data sources:

The index is made up of over 100 variables, two thirds of which come from the Executive Opinion Survey (soft data), conducted annually by the World Economic Forum. The Survey captures the perceptions of thousands of business leaders across countries on topics related to national competitiveness. One third comes from publicly available sources, including the International Monetary Fund, the World Bank and the United Nations (hard data).

Temporal domain/current coverage:

2006-2007; 2007-2008

Number of countries:

131 countries.

Indices/variables:

The index captures the many different aspects of competitiveness, grouped in twelve pillars: Institutions, Infrastructure, Macroeconomy, Health and Primary Education, Higher Education and Training, Good Market Efficiency, Labor Market Efficiency, Financial Market Sophistication, Technological Readiness, Market Size, Business Sophistication, and Innovation.

Methodology:

The impact of each pillar on competitiveness varies across countries, and is a function of their stages of economic development, such that higher relative weights are assigned to those pillars that are relatively more important for a country given its particular stage of development. The pillars are organized into three sub-indices, each critical to a particular stage of development: the basic requirements sub-index, the efficiency enhancers sub-index, and the innovation and sophistication factors sub-index. Countries are allocated to stages of development based on two criteria: the level of GDP per capita at market exchange rates, and the extent to which countries

are factor driven (countries that export more than 70 percent of primary products are considered to be factor driven). A moving average technique, which consists of taking a weighted average of the results of the current year survey and of the previous year survey, is used for computing the country scores. Each individual response of the current year sample is given 1.5 times more weight than each response of the previous year sample. The hard data indicators are normalized on a 1-to-7 scale in order to align them with the survey's results.

Access to information/availability:

http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm

Format:

PDF.

Global Peace Index [11]

Description/purpose:

The Global Peace Index is a quantitative measure of peacefulness designed to provide a greater understanding of the mechanisms that nurture and sustain peace in a given country. It seeks to determine the cultural attributes and institutions that are associated with states of peace. In order to inspire and influence world leaders and governments to further action it goes beyond the crude measure of war that the media tends to focus on, to provide a new platform for further study and discussion.

Supporting organization:

The Economist Intelligence Unit, in conjunction with an international team of academics and peace experts.

Principal investigators:

Professor Kevin P Clements, Director, Australian Centre for Peace and Conflict Studies (ACPACS) University of Queensland, Australia

Professor Daniel Druckman, Visiting scholar, Australian Centre for Peace and Conflict Studies (ACPACS) University of Queensland, Australia

Paul van Tongeren, Executive Director, Global Partnership for the Prevention of Armed Conflict (GPPAC), The Netherlands

Emeritus Professor Stuart Rees, Sydney Peace Foundation, University of Sydney, Australia Dr Manuela Mesa, Director, Peace Research Center (Centro de Investigación para la Paz, CIP-FUHEM) & President, Asociación Española de Investigación para la Paz (AIPAZ), Spain Professor Andrew Mack, Director, Human Security Centre, University of British Columbia, Canada

Alyson JK Bailes, Director, Stockholm International Peace Research Institute SIPRI), Sweden Dan Smith, Author, in a private capacity

Associate Professor Mohammed Abu-Nimer, School of International Service, American University, Washington DC, USA

Data sources:

International Institute of Strategic Studies, The World Bank, various UN offices and Peace Institutes and the Economist Intelligence Unit.

Temporal domain/current coverage:

2007, 2008.

Number of countries:

140 countries.

Indices/variables:

The 24 indicators of the existence or absence of peace, divided into three categories (Measures of ongoing domestic and international conflict, Measures of societal safety and security, and Measures of militarization), are used to create a score and a rank for each country.

Methodology:

Both qualitative and quantitative indicators, selected by an international panel of academics, business people, philanthropists and peace institutions, were used to create the index. Any gaps in the quantitative data have been filled by estimates from the Economist Intelligence Unit's Country Analysis team. Qualitative indicators have been scored by an extensive team of country analysts and in-field researchers. Indicators of quantitative data such as military expenditure or jailed population have been normalized based on: x = (x - Min(x)) / (Max(x) - Min(x)), where Min(x) and Max(x) are the lowest and highest values in the 140 countries for any given indicator, respectively. The normalized values were then transformed by the research team from a 0-1 value to a 1-5 score based on the relative importance of each indicator, to make them comparable with each other. Two sub-component weighted indices, a measure of internal peace and a measure of external peace of a country, were then calculated from the group of indicators. The overall composite score and index was then calculated by applying a weight of 60% to the measure of internal peace and 40% to the measure of external peace. The decision to apply a greater weight to internal peace was based on the notion that a greater level of internal peace is likely to lead to, or at least correlate with, lower external conflict.

Access to information/availability:

http://www.visionofhumanity.com/introduction/index.php

Format:

HTML.

Human Development Indicators [12, 13]

Description/purpose:

The human development indices were originally developed by a team of leading scholars, development practitioners and members of the Human Development Report Office of UNDP in 1990. These composite indices offer alternatives to GDP for measuring human well-being. The Human Development Index (HDI) is a comprehensive socio-economic measure of the average achievements in a country in three basic dimensions of human development: a long and healthy life, knowledge, and a decent standard of living. The Human Poverty Index for developing countries (HPI-1) measures human deprivation in the same dimensions of human development as the HDI, but for developed countries (HPI-2) it also includes social exclusion. The Gender-related Development Index (GDI) measures human development in the same dimensions as the HDI while adjusting for gender inequality. The Gender Empowerment Measure (GEM) measures the extent of women's political participation and decision-making, economic participation and decision making-power, and the power exerted by women over economic resources. The indices enable policy makers and development practitioners to evaluate progress over time and determine priorities for policy intervention in any given country, and they also allows for comparisons of experiences across different countries.

Supporting organization:

United Nations Development Programme (UNDP).

Principal investigators:

Director and lead author: Kevin Watkins

Research and statistics: Cecilia Ugaz (Deputy Director and chief editor), Liliana Carvajal, Daniel Coppard, Ricardo Fuentes Nieva, Amie Gaye, Wei Ha, Claes Johansson, Alison Kennedy (Chief of Statistics), Christopher Kuonqui, Isabel Medalho Pereira, Roshni Menon, Jonathan Morse and Papa Seck.

Data sources:

The Human Development Report Office uses data from various international agencies that collect and compile international data on specific statistical indicators, including:

Carbon Dioxide Information Analysis Center (CDIAC)

Demographic and Household Surveys (DHS)

Food and Agriculture Organization (FAO)

International Institute for Strategic Studies (IISS)

International Labor Organization (ILO)

International Monetary Fund (IMF)

International Telecommunication Union (ITU)

Inter-Parliamentary Union (IPU)

Joint United Nations Programme on HIV/AIDS (UNAIDS)

Luxembourg Income Study (LIS)

Organization for Economic Co-operation and Development (OECD)

The Penn World Table (PWT)

Stockholm International Peace Research Institute (SIPRI)

United Nations Children's Fund (UNICEF)

United Nations Conference on Trade and Development (UNCTAD)

United Nations Educational, Scientific and Cultural Organization (UNESCO)

United Nations High Commissioner for Refugees (UNHCR)

United Nations Office on Drugs and Crime (UNODC)

United Nations Multilateral Treaties Deposited with the Secretary General (UN Treaty Section)

United Nations Population Division (UNPOP)

United Nations Statistics Division (UNSD)

World Bank

World Health Organization (WHO)

World Intellectual Property Organization (WIPO)

Temporal domain/current coverage:

1990-2008

Number of countries:

HDI: 177; HPI-1: 108; HPI-2: 19; GDI: 156; GEM: 93

Indices/variables:

Human Development Index (HDI), Human Poverty Index (HPI-1 and HPI-2), Gender-related Development Index (GDI), and Gender Empowerment Measure (GEM). The HDI is a composite index of three basic components of human development: longevity, knowledge and standard of living. Longevity is measured by life expectancy. Knowledge is measured by a combination of adult literacy (two-thirds weight) and gross combined enrolment ratio at the primary, secondary and tertiary levels (one-third weight). Standard of living is measured by purchasing power, based on real GDP per capita adjusted for the local cost of living (purchasing power parity, or PPP). GDP per capita also serves as a catch-all measure for the additional socio-economic variables that are not captured by the health and education components.

Methodology:

The educational component of the HDI is comprised of weighted adult literacy rates (with two thirds weight) and the combined gross enrolment ratio for primary, secondary and tertiary schooling (with one third weight). The life expectancy component of the HDI is calculated using a minimum value for life expectancy of 25 years and maximum value of 85 years. For the wealth component, the goalpost for minimum income is \$100 purchasing power parity (PPP) and the maximum is \$40,000 PPP. The logarithm of income is used in calculating HDI, to reflect the diminishing importance of income with increasing GDP. Since the components of the HDI are represented in different units (GDP per capita, years of life, percentage of literate population, and ratio of enrolled students), each component is placed within goalpost limits, then divided by the maximum value for the indicator. This process results in a measure expressed as a value between 0 and 1 for each indicator. The overall HDI score is then calculated as a simple average of the three components.

The HPI uses indicators of the most basic dimensions of deprivation: a short life, lack of basic education and lack of access to public and private resources. The first dimension is represented by the probability of not surviving to ages 40 and 60, respectively for the HPI-1 and HPI-2. The second dimension is represented by the percentage of adults who are illiterate. The third dimension is represented by the unweighted average of the percentage of the population without access to safe water and the percentage of underweight children for their age (for HPI-1); for the HPI-2, it is measured by the percentage of the population below the income poverty line (50% of

median household disposable income). HPI-2 also includes social exclusion, as measured by the rate of long term unemployment.

The GDI adjusts average achievement measured by HDI to reflect inequalities between men and women, such that the GDI falls when the achievement levels of both women and men in a country go down or when the disparity between their achievements increases. The male and female indices are calculated for each of the three HDI dimensions and combined into an equally distributed index in a way that penalizes differences in achievement between men and women. The overall GDI score is obtained by combining the three equally distributed indices in an unweighted average.

The GEM measures gender inequality in three key areas: political participation and decision making power, as measured by women's and men's percentage share of parliamentary seats; economic participation and decision making, as measured by two indicators – women's and men's percentage share as legislators, senior officials and managers and men and women's percentage share of professional and technical positions; power over economic resources, as measured by women's and men's estimated earned income. An equally distributed equivalent percentage is calculated as a population-weighted average for each of the dimensions. The percentage is indexed for political and economic participation and decision-making dimension by dividing it by 50, and the overall GEM is calculated as an average of the three percentages.

Access to information/availability:

http://hdr.undp.org/en/statistics/indices/

Format:

PDF, Excel.

Index of Economic Freedom [14]

Description/purpose:

The Index is a systematic, empirical measurement of economic freedom in countries throughout the world, designed to document the link between economic opportunity and prosperity and to establish a benchmark by which to gauge a country's chances of economic success. It is based on economic theory and a set of objective economic criteria. It identifies the variables that comprise economic freedom and analyzes the interaction of freedom with wealth. A country's level of economic freedom reflects the ability of ordinary citizens to make economic decisions on their own and be fully in control of their labor and property.

Supporting organization:

The Wall Street Journal and the Heritage Foundation think tank.

Principal investigators:

Ambassador Terry Miller, The Heritage Foundation Kim R. Holmes, Ph.D., The Heritage Foundation Mary Anastasia O'Grady, The Wall Street Journal Anthony B. Kim, The Heritage Foundation

Data sources:

Various government agencies, internet sites, news reports and journal articles, as well as official responses to inquires.

Temporal domain/current coverage:

1995-2008.

Number of countries:

162 countries.

Indices/variables:

10 economic freedoms: Business Freedom, Trade Freedom, Fiscal Freedom, Government Size, Monetary Freedom, Investment Freedom, Financial Freedom, Property Rights, Freedom from Corruption, and Labor Freedom.

Methodology:

The 10 freedoms are graded on a continuous scale from 0 to 100 (with 100 representing maximum freedom) and are averaged into a total score. A score of 100 reflects an economic environment or a set of policies most conducive to economic freedom. Many of the freedoms are based on quantitative data that are converted directly into a score. The factors are equally weighted in order not to bias the overall score toward any one factor or policy direction.

Access to information/availability:

http://www.heritage.org/research/features/index/index.cfm

Format:

HTML, Excel.

Minorities at Risk [15]

Description/purpose:

Minorities at Risk (MAR) is a university-based research project that monitors and analyzes the status and conflicts of 284 politically-active groups from 1945 to present in countries with a population over 500,000. It focuses specifically on ethnopolitical groups as well as non-state communal groups that compose at least one percent of the country's population and have "political significance" because of their status and political actions, identifying where they are, what they do, and what happens to them. Political significance is determined by whether the group suffers or benefits from discriminatory treatment relative to other groups in the society, and whether the group is the basis for political mobilization and collective action for its self-interests. The project is designed to contribute to the understanding of conflicts involving relevant groups and uses a standardized format to allow comparative research. The project has developed over four phases: Phase I covered 227 groups for the years 1945-1990; Phase II covered 275 groups from 1990-1996; Phase III covered 275 groups from 1996-1999; and Phase IV covered 284 groups from 1998-2003.

Supporting organization:

University of Maryland's Center for International Development and Conflict Management (CIDCM). Funded by the National Science Foundation, the United States Institute of Peace, the Hewlett Foundation, the Carnegie Corporation, and the State Failure Task Force (Science Applications International Corporation, SAIC)

Principal investigators:

Jon Brown, Graduate Assistant Sanaz Sayfi, Graduate Assistant Jonathan Wilkenfeld, Acting Project Director Ted Robert Gurr, Founder Amy Pate, Research Director Carter Johnson, Graduate Assistant Alexander Jonas, Web Developer Mary Michael, Project Coordinator

Data sources:

Not listed.

Temporal domain/current coverage:

1945-2003.

Number of countries:

284 politically active ethnic groups in 163 countries across all phases.

Indices/variables:

Qualitative: Minority Group Assessments and Minority Group Chronologies; Quantitative: MAR dataset contains about 394 variables grouped in 5 categories: Group characteristics and status, Group discrimination, Group organization, Group collective interests, and Group conflict

behaviour. The Discrimination dataset records overall levels of political and economic discrimination for all groups during the period between 1950 and 2003. The Political Differentials Index is a seven-category scale (values from -2 to +4) of intergroup differentials in political status and positions derived from codings of six dimensions (i.e., Access to Power, Access to Civil Service, Recruitment, Voting Rights, Right to Organize, and Equal Legal Protection). Political differentials are equivalent to political inequalities but are not necessarily the result of deliberate discrimination. The Economic Differentials Index is a seven-category scale (values from -2 to +4) of intergroup differentials in economic status and positions derived from codings of six dimensions (Income, Land/Property, Higher Education, Presence in Commerce, Presence in Professions, and Presence in Official Positions). Economic differentials are equivalent to economic inequalities but are not necessarily the result of deliberate discrimination.

Methodology:

Coders are well-trained students and all coding is reviewed by senior personnel. Inter-coder reliability has not yet been assessed, nor have the indicators been systematically screened for internal consistency. A national advisory board was established in 1999 to provide guidance on groups to be included, new indicators, and data quality control issues.

Access to information/availability:

http://www.cidcm.umd.edu/mar/

Registration is required to obtain quantitative data.

Format:

The Minorities At Risk Data Generation and Management Program (MARGene) was developed by Ted Gurr and associates to allow easy access to variables, creating subsets of the data, interpolating across unobserved data points, and setting up the data for merging with other state-level datasets. The program can create a new, customized dataset that can be loaded into statistical analysis software such as Stata, SPSS, or Limdep, for further manipulation and/or analysis. The data is also available in ASCII text file.

The Discrimination dataset is offered in SPSS and Excel files.

Political Terror Scale [16, 17]

Description/purpose:

Since the early 1980s, Mark Gibney and a team of human rights scholars and students have translated two independent annual human rights reports (Amnesty International and the US State Department), into a numerical scale measuring levels of political violence and terror that a country experiences in a particular year. The Political Terror Scale allows scholars and advocates to study states' human rights record against prevailing norms, in comparison to one another, in relation to other social variables, and over time. As such, the scale can be used for promoting compliance with international human rights norms.

Supporting organization:

Political Science Department, University of North Carolina Asheville

Principal investigators:

Mark Gibney, Belk Distinguished Professor, Prof. of Political Science, University of North Carolina at Asheville

Linda Cornett, Associate Professor of Political Science, University of North Carolina at Asheville

Reed Wood, Department of Political Science, University of North Carolina

Data sources:

Yearly country reports of Amnesty International and the U.S. State Department Country Reports on Human Rights Practices.

Temporal domain/current coverage:

1976 to 2006.

Number of countries:

179 countries.

Indices/variables:

Countries are coded on a five-level numerical scale according to the level of political violence described in the reports. The scale was originally developed by Freedom House.

Methodology:

At least two coders read the reports and separately code each country, and scores are then compared. Coders are asked to provide a score and a few comments justifying their decision. In the coding process, the coders are instructed to ignore their own biases, give countries the benefit of the doubt, consider the size of the country being coded, and view the various levels as part of a continuum. When there are discrepancies, a third party attempts to resolve any conflicts between the coders using a rule of majority vote. Usually, the dispute resolution is accomplished by informal discussions. Inter-coder reliability is generally in the range of 70-90%. The coding scheme is as follows⁴:

⁴ Source: http://www.politicalterrorscale.org/about.html

Level 1: Countries under a secure rule of law, people are not imprisoned for their view, and torture is rare or exceptional. Political murders are extremely rare.

Level 2: There is a limited amount of imprisonment for nonviolent political activity. However, few persons are affected, torture and beatings are exceptional. Political murder is rare.

Level 3: There is extensive political imprisonment, or a recent history of such imprisonment. Execution or other political murders and brutality may be common. Unlimited detention, with or without a trial, for political views is accepted.

Level 4: Civil and political rights violations have expanded to large numbers of the population. Murders, disappearances, and torture are a common part of life. In spite of its generality, on this level terror affects those who interest themselves in politics or ideas.

Level 5: Terror has expanded to the whole population. The leaders of these societies place no limits on the means or thoroughness with which they pursue personal or ideological goals.

Access to information/availability:

http://www.politicalterrorscale.org/

Format:

Excel.

Polity IV Project: Political Regime Characteristics and Transitions, 1800-2006 [18]

Description/purpose:

Polity IV contains coded annual information on regime and authority characteristics of states with populations of over 500,000. The Polity project is one of the most widely used resources by researchers interested in monitoring regime change and studying the effects of regime authority. The Polity project has evolved through three earlier research phases, under the direction of Ted Gurr. Through its evolution, the data format has been transformed from its original focus on "persistence and change" with "polity" as the unit of analysis (i.e., polity-case format) to its present country-year case format. In the late 1990s, Polity became a core data project in the State Failure global analysis project, and since then the state continuity and change (country-year format) and regime persistence and change (polity-case format) have been combined into a single data resource base.

Supporting organization:

Center for International Development and Conflict Management (University of Maryland) & George Mason University's Center for Global Policy.

Principal investigators:

Monty G. Marshall and Keith Jaggers are the co-principal investigators of the Polity Project. The Polity data series was originally designed by Ted Robert Gurr, and is now directed by Monty G. Marshall at George Mason University.

Data sources:

The Polity I data was collected in the mid-1970s by a single coder, Erika B. K. Gurr. Multiple historical and social science works were used for each country, along with references to standard sources, to compile a basic political chronology. The compilation process employed continuously refining category definitions and coding guidelines. Periods of substantial change were identified and examined to determine whether events met the pre-specified criteria for changes in and of polities. The same sources were used for the coding of authority characteristics. The Polity I Codebook, dataset, and narrative summaries of the political chronologies for each polity, along with source lists, were deposited with and distributed by the Inter-University Consortium for Political and Social Research. The Polity IV data has been updated through 2006.

Temporal domain/current coverage:

1800-2006.

Number of countries:

161 countries.

Indices/variables:

Institutionalized democracy, Institutionalized autocracy, Combined polity score, Regime durability, Polity persistence; Executive recruitment, Executive constraint, Political recruitment; Polity regime transitions.

Methodology:

Polity regime characteristics are examined twice yearly, under contracts with the US government. The May coding cycle updates annual Polity scores for all countries; the November research cycle examines specific regime changes that have occurred since January 1 of the coding year. The Polity project's data collection and updating procedures contain periodic coding review and revision mechanisms to ensure a high degree of reliability and consistency.

Access to information/availability:

Registration required. Registration is free. http://www.systemicpeace.org/polity/polity4.htm

Format:

Manual in PDF; data in Excel and SPSS.

Polyarchy and Contestation Scales [19]

Description/purpose:

"Polyarchy is defined as the set of institutional arrangements that permits public opposition and establishes the right to participate in politics"⁵. The Polyarchy scale is designed to measure the degree to which national political systems meet the minimum requirements for political democracy. The minimum requirements include freedom to form and join organizations, freedom of expression, the right to vote, eligibility for public office, the right of political leaders to compete for support, alternative sources of information, free and fair elections, institutions for ensuring that government policies depend on votes and other expressions of preference. The scale is considered to be a coarsely calibrated instrument useful for identifying countries that are similar in the degree of polyarchy they possess, or for making comparisons among dissimilar countries.

Supporting organization:

University of Notre Dame.

Principal investigators:

Michael Coppedge.

Data sources:

For the 1985 scales, multiple sources of information were used, that differed in terms of quality, format and completeness of information. For the 2000 scales, the State Department's *Country Reports on Human Rights Practices* for 2001 was the only source of information.

Temporal domain/current coverage:

Mid-1985 and mid-2000.

Number of countries:

196 countries.

Indices/variables:

Extent of the suffrage, fairness of elections, freedom of organization, freedom of expression, media pluralism, polyarchy scale and contestation scale.

Methodology:

Both the Polyarchy Scale and the Contestation Scale are quasi-Guttman scales using polytomous items (Guttman scale consist of items with binary answers rank-ordered such that the response pattern could be captured by a single index on the scale). All the variables that compose the scale are weighted equally. For the 1985 scales, there were two coders (the authors), and a reliability check. The coders reviewed all the sources and jointly agreed on all the ratings, sometimes after consulting additional sources. For the 2000 scales, undergraduate and graduate students replicated the coding for all countries (at the same level of reliability as the original coders, 82-86%). The Polyarchy scale ranges from 0 to 10, and the Contestation Scale is a less precise but more reliable

⁵ Source : (Coppedge & Reinicke, 1990)

version of the Polyarchy Scale, created by combining categories 4 and 5, and 8 and 9. Categories were combined in the aggregated scale only, not in the component variables.

Access to information/availability:

http://www.nd.edu/~mcoppedg/crd/datacrd.htm

Format:

Excel, SPSS.

Press Freedom Index [20]

Description/purpose:

The Press Freedom Index measures the state of press freedom in the world. It reflects the degree of freedom journalists and news organizations enjoy in each country, and the efforts made by the state to respect and ensure respect for this freedom.

Supporting organization:

Reporters Without Borders.

Principal investigators:

Not listed.

Data sources:

A questionnaire was compiled by Reporters Without Borders and completed by 130 correspondents from their partner organizations (14 freedom of expression groups in five continents), as well as a number of journalists, researchers, jurists and human rights activists.

Temporal domain/current coverage:

2002-2006.

Number of countries:

168 countries.

Indices/variables:

Ranking and a score which together sum up the state of press freedom.

Methodology:

Reporters Without Borders developed a questionnaire with 50 criteria to assess the state of press freedom in each country. It includes press freedom violations, such as violations directly affecting journalists (murders, imprisonment, physical attacks and threats) and news media violations (censorship, confiscation of issues, searches and harassment). It also takes into account other factors, such as the degree of impunity enjoyed by those responsible for such violations; the legal situation affecting the news media; the behaviour of the authorities towards the state-owned news media and the foreign press; and the main obstacles for the free flow of information on the Internet. Each questionnaire was given a country score according to the scale developed by the organization. Data were processed with the assistance and advice of The Statistics Institute of the University of Paris. Only those countries for which completed questionnaires were received from a number of independent sources were ranked.

Access to information/availability:

http://www.rsf.org/article.php3?id article=19391

Format:

HTML.

World Governance Indicators [21]

Description/purpose:

The Worldwide Governance Indicators project measures six dimensions of governance that combine the views of a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. The wide variety of data sources includes survey institutes, think tanks, non-governmental organizations, and international organizations. The main benefit of the aggregate indicators is that they are more informative about governance than any individual data source alone. For the purposes of the project, governance is defined as the set of "traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect of citizens and the state for the institutions that govern economic and social interactions among them"⁶.

Supporting organization:

World Bank.

Principal investigators:

Daniel Kaufmann, World Bank Institute Aart Kraay, World Bank – Development Research Group Massimo Mastruzzi, World Bank – Research Department

Data sources:

There are 310 individual variables measuring different dimensions of governance, taken from 33 different data sources, produced by 30 different organizations. Data sources include surveys of individuals or domestic firms with first-hand knowledge of the governance situation in the country, such as the World Economic Forum's Global Competitiveness Report, the Institute for Management Development's World Competitiveness Yearbook, the World Bank's business environment surveys, the Gallup World Poll, Latinobarometro, and Afrobarometro. These surveys are meant to capture the perceptions of country analysts at the major multilateral development agencies (the European Bank for Reconstruction and Development, the African Development Bank, the Asian Development Bank, and the World Bank), that are based on their in-depth experience working on the countries they assess. In addition, there are a number of data sources provided by various nongovernmental organizations such as Reporters Without Borders, Freedom House, and the Bertelsmann Foundation; and commercial business information providers, such as the Economist Intelligence Unit, Global Insight, and Political Risk Services.

Temporal domain/current coverage:

1996-2007.

Number of countries:

212 countries.

Indices/variables⁷:

⁶ Source: http://info.worldbank.org/governance/wgi2007/home.htm

⁷ Source: (Kaufmann, Kraay, & Mastruzzi, 2007)

Voice and Accountability measures the extent to which country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media.

Political Stability and Absence of Violence measures the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional or violent means, including domestic violence and terrorism

Government Effectiveness measures the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies Regulatory Quality measures the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development Rule of Law measures the extent to which agents have confidence in and abide by the rules of society, in particular the quality of contract enforcement, the police, and the courts, as well as the likelihood of crime and violence

Control of Corruption measures the extent to which public power is exercised for private gain, including petty and grand forms of corruption, as well as "capture" of the state by elites and private interests.

Methodology:

The data is combined into six aggregate indicators that correspond to six dimensions of governance, using a statistical procedure known as the Unobserved Component Model. The UCM procedure first rescales the individual indicators from each source in order to make them comparable, and then constructs a weighted average of each to arrive at an aggregate indicator of governance for a particular country. The weights assigned to each data source are based on the estimates of the precision of each source that are produced by the model, i.e. the data sources that are more correlated with each other provide more reliable information about a governance dimension, and so receive greater weight.

Access to information/availability:

http://info.worldbank.org/governance/wgi2007/home.htm

Format:

Excel.

References

- Pavlovic, N. J., Hoshino, L. C., Mandel, D. R., & Dorn, A. W. (2008). *Indicators and indices of conflict and security* [DRDC Toronto Technical Report TR-2008-167].
 Toronto, ON: Defence Research and Development Canada Toronto.
- 2. *Bertelsmann Transformation Index*. 2008 [cited 2008 July 21]; Available from: http://www.bertelsmann-transformation-index.de/11.0.html?&L=1.
- 3. *Transparency International Corruption Perceptions Index*. [cited 2008 April 8]; Available from: http://www.transparency.org/policy_research/surveys_indices/cpi.
- 4. *World Democracy Audit*. [cited 2008 May 2]; Available from: http://www.worldaudit.org/publisher.htm.
- 5. *The Failed States Index* 2007, in *Foreign Policy*. 2007, Fund for Peace and Carnegie Endowment for International Peace: Washington DC.
- 6. *Country Indicators for Foreign Policy Failed and Fragile States*. [cited 2008 July 21]; Available from: http://www.carleton.ca/cifp/ffs.htm.
- 7. *Freedom House: Freedom in the World*. [cited 2008 April 4]; Available from: http://www.freedomhouse.org/template.cfm?page=15.
- 8. *Freedom House: Freedom of the Press.* [cited 2008 April 4]; Available from: http://www.freedomhouse.org/template.cfm?page=16.
- 9. Porter, M.E., *The Global Competitiveness Report 2007-2008*. 2007, New York: Palgrave Macmillan for World Economic Forum.
- World Economic Forum: Global Competitiveness Report. [cited 2008 May 6]; Available from: http://www.weforum.org/en/initiatives/gcp/Global%20Competitiveness%20Report/index.htm.
- 11. Vision of Humanity: Global Peace Index. [cited 2008 May 05]; Available from: http://www.visionofhumanity.com/introduction/index.php.
- 12. *Human Development Reports Composite Indices*. [cited 2008 May 06]; Available from: http://hdr.undp.org/en/statistics/indices/.
- 13. *Human Development Report 2007/2008: Technical Note 1*. Human Development Report. 2007, New York: Palgrave Macmillan for United Nations Development Programme.
- 14. Holmes, K.R., E.J. Feulner, and M.A. O'Grady, 2008 Index of Economic Freedom. 2008, The Heritage Foundation and Dow Jones & Company, Inc.
- 15. Minorities at Risk Project (2005) College Park, MD: Center for International Development and Conflict Management. . [cited 2008 July 9]; Available from: http://www.cidcm.umd.edu/mar/.
- 16. Gibney, M. and M. Dalton, *The Political Terror Scale*. Policy Studies and Developing Nations, 1996. **4**: p. 73-84.
- 17. Cornett, L. and M. Gibney, *Tracking Terror: The Political Terror Scale, 1980-2001.* 2003, Commissioned by Human Security Center.
- 18. Marshall, M.G. and K. Jaggers, *Political Regime Characteristics and Transitions, 1800-2004*, in *Polity IV project: Dataset Users' Manual.* 2005, Center for Global Policy, School of Public Policy, George Mason University: Arlington VA. p. 1-83.
- 19. Coppedge, M. and W.H. Reinicke, *Measuring polyarchy*. Studies in Comparative International Development, 1990. **25**(1): p. 51-72.

- 20. Worldwide Press Freedom Index 2006: How the index was compiled. 2006 [cited 2008 April 9]; Available from: http://www.rsf.org/article.php3?id_article=19391.
- 21. Kaufmann, D., A. Kraay, and M. Mastruzzi, *Governance Matters VI: Governance Indicators for 1996-2006*, in *World Bank Policy Research Working Paper No. 4280*. 2007.

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This DRDC Toronto technical memorandum contains summaries of a select number of widely used conflict and security indices freely available as open-source databases on the World Wide Web. It provides a succinct description and purpose of each project, information about the supporting organization, principal investigators, data sources used, temporal coverage, the number of countries included, variables, methodology, accessibility and format. The summaries represent a focused extension of DRDC Toronto Technical Report 2008-167, which aimed to provide a comprehensive overview of open-source databases accessible via the Internet that are meant to be used as guides for international investors, official aid donors, policy makers, analysts, academia and other information seekers looking to exploit conflict-and security-related open-source information.

Le présent document technique de RDCC Toronto résume un certain nombre d'indices de conflits et de menaces à la sécurité largement consultés sur le Web. Il fournit une brève description de chaque projet ainsi que ses objectifs et des renseignements à propos de l'organisme d'appui, des principaux enquêteurs, des sources de données utilisées, de la portée temporelle, du nombre de pays participants, des données et des variables, de la méthodologie, de l'accessibilité et du format. Ces résumés constituent la suite du rapport technique 2008-167 de RDCC Toronto, qui donnait un aperçu complet des bases de données ouvertes et accessibles sur Internet destinées à guider les investisseurs étrangers, les donateurs officiels, les décideurs, les analystes, les universitaires et autres personnes cherchant à obtenir de l'information liée aux conflits et à la sécurité à partir de sources ouvertes.

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